

PLAIN and FAMILIAR
INSTRUCTIONS
ON
RUPTURES,

Designed for the Use of the

FEMALE SEX:

In which are given
DISTINCT NOTIONS
OF THESE
MALADIES,
AND

The most proper MEANS of curing them :

Together with

Accurate RULES and DIRECTIONS on the Use
and APPLICATION

OF

TRUSSES.

By Mademoiselle GUITON,
SURGEON of Paris.

L O N D O N :

Sold at the AUTHOR's, at N^o. II. in Martlet-Court, Bow-Street,
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Court of Requests. 1750.

(Price one Shilling.)



P R E F A C E.



S Ruptures are disorders, on which, very preposterously, a character of disgrace has been fastened, so almost all those of our sex, who labour under them, imagine these infirmities to be a stain to their honour; they fix upon them a kind of ignominy, which is the reason, that instead of having recourse to the remedies proper for them, they would, by a misplaced shame, dissemble them to others, and even conceal from themselves the knowledge of the danger they are in.

We shall find this delicacy to be quite out of place, if we consider, that these disorders are the most common of all those afflicting human bodies; that they are the growth of every country, the fate of every age,
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and of every condition in life, and that they happen through causes much more simple and innocent, than most of those producing the other distempers.

'Tis through the conviction of this truth, that persons of distinguished rank, who have deigned to own their mistake on this head, have prevailed upon me to publish the following instructions. Their purpose was, that all persons afflicted, as they were, might learn to lay aside their prejudices, and set about to procure for themselves the means of aid these disorders call for.

The circumstances of my life put me in a capacity of acquitting myself of this duty, with all the precision necessary to a work of this nature: Born in the bosom of surgery, and brought up under the instructions of Mr. Arnaud, author of the treatise on these distempers, published not long since, I have been enabled (tho' the only one of my sex) to merit the honour of being admitted into the number of the surgeons of Paris, for the treatment of Ruptures in women. Some persons, jealous of my talents, do indeed dispute me this privilege, and attempt to misguide the public on my score; but the patent, or letters of my Reception, subjoined to this preface, must defeat all such surmises, in justifying my title to that honour.

To come up fully to my engagements, I propose, in these instructions, to put persons of my sex on their guard against the untoward symptoms attending ruptures. These disorders, which are so many concealed

cealed enemies, because unknown, will no sooner be discovered than be destroyed. Each patient will be in condition, upon reading this dissertation with a small degree of attention, to become acquainted with these maladies, and their cure: No longer shall any one be able to alledge her want of knowledge for excuse; nor any longer be restrained, by reasons of decency or modesty, on a conviction of our understanding in these kinds of disorders.

All the views of the persons, for whom I write, are here fully answered, in the order I observe for their instruction. I set out with the notion of Ruptures in general; then I enter upon a particular detail of each of these disorders: I describe the parts where they are formed, in proportion as I come to speak to the differences of these distempers: I explain their causes, their symptoms and signs; so that, with a glance of the eye, the female reader may become acquainted with each particular case. Finally, I come to speak to the means of effecting a radical cure upon them. And, among all the means, bandages or trusses being the most common and most necessary, I enlarge, as much as possible, on the manner of making and adjusting them to the body of the patient. I lay down the necessary rules for taking the proper measures of the body; in order to execute them well, and I point at the inconveniencies which some have opposed to the use of these machines: And every one not being in case of having the necessary relief against the strangulation of the gut, each
female

female patient will here find the most efficacious remedies, and easy of execution, that can possibly be employed, against that symptom; and by their means may remove it themselves.

I have avoided, as much as possible the use of the terms of art, which are always uncouth to persons not of the profession, and substituted in their stead those of a more familiar and common use.

The Extract of the PATENT mentioned above,

F*rancis de la Peyronnie, Esq; counsellor, first surgeon to the king, head of the surgery of the kingdom, &c. To all to whom these presents shall come, greeting, &c. Taking into our consideration the consent of the first physician to the king, we have ordered the matriculation of Demoiselle Mary Guiton, and that she shall appear, in our chamber of jurisdiction of St. Comte at Paris, to pass examination; where having appeared, being conducted and presented by Mr. George Arnaud, master in surgery at Paris, we have interrogated and examined her, and caused her to be interrogated and examined, on all the branches of the herniary surgery, and on the construction, composition, and application of the trusses proper for the Ruptures of women, in presence of the dean of the faculty of physic of Paris, the*

receiver in office, and the dean of the company of surgeons of *Paris*, of all the masters which constitute the council of the said company, of the two masters of each of the four classes, and of the two Experts, by the four wardens in office. After several examinations, the said *Mary Guiton* having withdrawn, with the advice of the meeting, which had found her qualified, we have received and admitted, and do hereby receive and admit, the said *Mary Guiton* to the quality of an Expert, for the cure of Ruptures, and for the construction, composition, and application of the trusses and other instruments necessary for the Ruptures happening in women, &c. In consequence of which, we have allowed, and do hereby allow you the said Demoiselle *Mary Guiton*, to settle in quality of Expert for the Ruptures of women in any part of the city and suburbs of *Paris* you shall judge proper; but provided always, that you the said *Mary Guiton* shall, on every first Monday of the month be present at *St. Come*, at the visitation of the poor women labouring under these maladies, and pay yearly the dues to the company; and we have taken of the said Demoiselle *Guiton* the oath required and customary. In witness of which Mr. *Nicolas Bourgeois*, our Lieutenant, has signed these presents, caused to affix the seal of our arms to them, and to be counter-sign'd by Mr. *Charles Jacques Collins*, procurator to the chatelet of *Paris*, our ordinary register, and

[viii]

of our chamber of jurisdiction of St. Come at Paris.
Given in our said chamber of jurisdiction of St.
Come at Paris, Tuesday the 24th of January,
one thousand seven hundred and forty one.



Signed

Bourgeois,

STATION CO
COLLIN.





T H E

CONTENTS.

CHAP. I.

OF Ruptures in general. p. 1.

CHAP. II.

Of the general causes of Ruptures. 3

CHAP. III.

Of the signs of true hernias. 6

CHAP. IV.

Of the symptoms of Ruptures. 8

CHAP. V.

Of the Ruptures of the navel. 11

CHAP. VI.

Of the Rupture of the groin. 13

CHAP. VII.

Of the crural hernia. 16

CHAP. VIII.

Of the ventral hernia. 18

CHAP.

CH A P. IX.

Of the manner of remedying the strangulation. p. 20

CH A P. X.

Of the trusses proper for the different species of Ruptures. 23

CH A P. XI.

Of the inconveniencies which may happen during the use of trusses. 26

CH A P. XII.

A method for taking the measures of the trusses necessary for persons afflicted with Ruptures. 32

CH A P. XIII.

On the manner of putting on the trusses; necessary precautions to be observed previous to the laying or adjusting them. 35

CH A P. XIV.

Of the radical cure of Ruptures. 38

CH A P. XV.

Of the Ruptures of the womb, otherwise called the inversion of the womb, relaxation of the womb, falling of the womb; the relaxation and inversion of the vagina. 39

CH A P. XVI.

Of the relaxation of the fundament. 44

CH A P. XVII.

Of false hernias. 45



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CHAP. I.

Of Ruptures in general.

THE DESIGN OF
THE WORK.



THE intention, which I
have of giving instruc-
tions to persons of my
own sex afflicted with

Ruptures, necessarily obliges me to engage in some de-
tail upon the character of these disorders, their differ-
ences, their causes, their signs, and their symptoms,
in order to arrive at the knowlege of the means
proper to guard against, or cure them.

B

WHAT

WHAT A RUPTURE IS. Ruptures are tumours or swellings formed by the issuing forth of certain parts contained in the belly.

They are so called, because there is produced a kind of division or separation of some of the parts of the belly, which serve to contain the caul, the guts, the liver, the spleen, the stomach, &c. These parts, which separate or divide, are called the muscles, and these have five natural apertures or openings, which serve to give exit or issue from the belly to certain necessary parts. Of these openings I shall speak in the following chapter.

DIVISION OF RUPTURES. Ruptures are divided into true and false.

TRUE. The true Ruptures are those formed by the coming forth of those parts contained in the lower belly.

FALSE. The false Ruptures are tumours or swellings formed by the collection of the blood, the lymph, or other humours, in the parts where the true Ruptures happen.

DISTINCTION OF RUPTURES. Ruptures are distinguished according to the parts of which they consist, and the places they possess.

DIFFERENCES. They differ among themselves on the score of the parts of which they consist; in that some are formed by the guts; others by the caul; and others, again, by the guts and the caul together.

UNCOMMON RUPTURES. There are also some Ruptures formed by the stomach, the bladder (which happens rarely); others by the ovaries, and the womb passing thro' the openings, in the bending of the groin; but these sorts of Ruptures happen still more rarely: and so, without insisting on a particular detail of them, which would throw confusion into the discourse, I shall only

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to which I shall add those of the womb, and the fall-
ing of the fundament.

DIFFERENCES OF TRUE RUPTURES. The true Ruptures differ among themselves, from the places they possess ; in that some happen in the navel ; and these are therefore called *umbilical hernia's*, or Ruptures of the navel : Others in the groin, and these are called *inguinal* : Others, in the bending of the thighs, and called *crural* : Others, again, are formed in different parts of the surface of the belly, and called *ventral*, or Ruptures of the belly.

There are, besides, other Ruptures which happen in other parts, and which, for that reason, differ from these others ; as some happen in the loins, others in the vagina ; others, again, which are formed at the holes at the bottom of the haunch-bones ; but I shall wave speaking of all these different sorts of Ruptures, as they happen but very rarely, to engage our attention here ; these extraordinary cases claiming only the attention of the people of the art or profession.

C H A P. II.

Of the general causes of Ruptures.

WHAT A **P**HYSIICIANS call causes of disease every affection against nature, which produces, or which concurs to produce, diseases. The causes of Ruptures are divided into remoter or primitive, and into proximate or determining.

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REMOTE CAUSES. The remote causes are those, which arise from the temperament or constitution, which the patients bring with them into the world, or from the disposition they acquire by their manner of living. It is not to be doubted, but that children ordinarily enough inherit the good or bad qualities of the soul and body of their parents; so that there is nothing more certain, than that robust parents produce strong and vigorous children; and the delicate, children of the like delicacy of constitution with themselves; the gouty, gouty; and the phthical, phthical, &c. And those who have Ruptures commonly enough children with the like indispositions with themselves; consequently the most remote causes of Ruptures may be traced up to the disposition which is communicated to the child at the moment of its conception.

PRIMITIVE CAUSES, WHENCE THEY MOST COMMONLY PROCEED. It is much more common to find the primitive or remote causes of these diseases in the manner of living. All the parts which are contained in the belly, and all those which form it, are naturally softened and relaxed by the too moist air which is respired; by the marshy places which are inhabited; by the too relaxing aliments that are used, as the too thin milk of a nurse of a bad constitution; by the oil, the butter, the too great quantity of water, small-beer, and other the like drinks.

DETERMINING CAUSES. Every thing that is capable of determining the parts, already relaxed, to come forth, is considered as immediate causes of these disorders. Loud crying, leaping, straining, constipation, pregnancy, and child-bearing, force the parts contained in the belly to stretch, and come out at those places where they happen to find the least degree of resistance.

NATURAL OPENINGS. In the belly there are five natural openings; but which are neither apparent, nor even surmised to be there, by persons unacquainted with anatomy; because, like all the other parts, they are covered by the skin and fat. Of these five openings the navel is the first; two others are situated in the groin, and called *rings*; two others in the bendings of the thighs, and called *arcades* or *arcs*. These openings, in their natural state, are exactly filled by other parts, which are destined to come forth of the belly. In the hole of the navel are the remains of the navel-string, which, during the time the child is in the body of the mother, serves to convey nourishment to it. Thro' the rings pass two sorts of strings, which serve to support the womb, and are called the round ligaments of the womb. Below each of the arcades pass the vessels, which carry the blood for nourishing the inferior extremity.

PRETERNATURAL OPENINGS. Besides the natural openings, thro' which the parts contained in the belly may come out, there are, besides, others very often formed in all the anterior surface of the belly; because the parts, which are under the skin and the fat, called *muscles*, and which serve to form the belly, are susceptible of separations and divisions, which let out the caul and the guts. Besides the muscles, there is another part, which immediately covers all those contain'd in the belly; this part is called the *peritoneum*. This peritoneum does not divide; but is capable of being extended and lengthened considerably, tho' of a very delicate texture, its thickness resembling nearly that of a hog's bladder; it always forms a part of the Rupture, and serves as a covering to the guts, when out of the belly, in the same manner as in it. It is called

called the herniary sac, when out of the belly; an appellation very significant, since it serves as a sac to contain the Rupture.

IMMEDIATE OR DETERMINING CAUSES. In order to find the immediate causes of hernia's or Ruptures, and at the same time guard against them, it sufficeth to attend to the general idea, which we have just now formed from the natural openings in the belly, and from those which may be produced therein in an extraordinary manner, by the separation of the muscles. When the first or primitive causes have brought the parts contained in the belly to a state of relaxation, by the great quantity of moisture communicated to the blood by the natural constitution, by the method of living, or by the air respired, how inconsiderable soever the efforts or strainings happen to be, the guts will be disposed to make their way out of the belly by the parts, where they find the least resistance. Now, as they find less at the natural openings, or in the parts disposed to separate, they will not fail to come out of the belly at these places, and form one or several Ruptures, according to the greater or less degree of resistance they meet with in any of those parts.

CH A P. III.

Of the signs of true hernia's.

WHAT A SIGN IS. **T**HE signs in diseases are sensible marks, which discover, and distinguish them from each other. Some of them discover the present state, the character, and the species of the disease;

disease ; and they are called diagnostic. Others again enable us to judge of the issue of a disease ; and these are called prognostic.

DIAGNOSTIC SIGNS OF RUPTURES. The diagnostic signs, common to all true hernia's or Ruptures, differ according to the progress of the disease. When the Rupture is just about forming, the patient feels a small pain, like that of an excoriation, or ruffling of the skin, and that within the belly ; when the Rupture encreases, the patient perceives, on applying the hand, a small swelling, which disappears upon pressing with the finger : When entirely formed, collical pains are from time to time felt in the part of the Rupture, and which extend to the parts about the navel. The diagnostic signs, common to all the species of true hernia's, do, besides, discover what parts they consist of, whether of the gut or caul, or of both together. Those consisting of the gut are known by a small rumbling noise caused by the wind and the fluid matters contained in the gut, which rumbling is heard, especially, upon handling the Rupture, in order to procure its return.

Those formed of the caul discover themselves, upon the touch, by a doughy resistance, like what we feel, when we come to handle a piece of tripe. In those formed of the gut and caul together, these signs are mixt, that is to say, they are found combined.

PROGNOSTIC SIGNS OF RUPTURES. In regard to prognostic signs, it may be said, in general, that Ruptures are very troublesome disorders, when they are neglected, and come to be attended with symptoms : Those formed of the gut are more dangerous than those formed of the caul ; those happening in the navel and belly, more difficult to cure than those
called

called inguinal, and those happening in the bending of the thigh, are, of all, the most difficult of cure.

The hernia's of the womb are, in general, more troublesome than dangerous.

Those of the fundament, called the falling of the fundament, are the least dangerous; but the most difficult to cure.

In fine, all of them are so much the more difficult to cure, as they are of an older standing; consequently less so in children.

CH A P. IV.

Of the symptoms of Ruptures.

WHAT A SYM-PTOM IS. **E**VERY thing that supervenes or happens upon a disease, and renders it more grievous, is called a symptom; as, for instance, a flux of blood coming upon a looseness, a delirium upon a fever, and the like.

STRANGULATION. Of all the symptoms of Ruptures, that of the strangulation is the most formidable and dangerous, and against which patients should be most on their guard, either in preventing it, or seeking out the means of cure, and using them instantly upon this symptom; never so little neglected, it is impossible for the expertest surgeon to remedy it. The death of the late queen is too sensible an instance of this truth, not to be capable of striking every patient; for who could procure better means of assistance than she upon this melancholy occasion?

WHAT

WHAT STRANGULATION IS. By strangulation we understand a degree of straitening, which happens thro' the strong compression of the parts thro' which the gut passes, and which no longer suffer it to return into the belly. In this case, then, the gut is strangled, and this strangulation cannot happen without two other symptoms extremely easy to be understood; the first is an inflammation and gangrene; the second, an impediment to the passage of the feces into the gut; from whence it necessarily follows, that the feces must return by the mouth, by throwing them up; if the return of the gut into the belly be not procured, for the feces to take their ordinary course by the fundament.

Tho' sometimes it happens, that it is not above five or six hours before the feces return by the mouth; yet this is not so commonly the case: The vomiting comes on for the most part on the 3d or 4th day; sometimes not till after 8, 9 and 10 days; but the patients are afflicted with such symptoms, as by preceeding the vomiting, announce and characterize the strangulation of the gut so distinctly, that every one who will but attend, can never mistake the case.

Here follows the detail of the symptoms.

FIRST, The Rupture grows bigger than ordinary.

SECONDLY, Causes much pain.

THIRDLY, Baffles all attempts to reduce it.

FOURTHLY, The pain extends as far as round the navel, if the Rupture be in the bending of the thigh; if in the navel, the pain, beginning there, extends to the groin.

FIFTHLY,

FIFTHLY, The pains called gripes hold only for some minutes; but recur from time to time, and the disorder they cause, is daily increasing.

SIXTHLY, Upon these gripings comes wind, which is plentifully discharged at the mouth; the patient cannot discharge it by the fundament, notwithstanding all the inclination she seems to have to do it by that part.

SEVENTHLY, The patient is troubled with loathings, or an inclination to vomit, which terminate in a plentiful salivation, thick and glutinous.

EIGHTHLY, At last the patient throws up the aliments, then come the feces, whose taste and smell are extremely nauseous.

During the series and increase of the symptoms, the Rupture swells, the belly turns hard, and very big, a fever comes on, and heightens more and more.

But, on the close of the distemper, the vomitings slacken, the patient is afflicted with hiccups, the belly subsides, and becomes insensible, the Rupture turns soft and livid; the sight fails; the pulse turns intermitting and languishing, at length is totally lost, and the patient dies for want of having foreseen the means of guarding against a death she might have avoided.

ADHESIONS. Ruptures are, besides, subject to another symptom, called adhesion; 'tis an union, which is made between the parts coming out of the belly and those without it, as the fat and the skin, &c. The parts which are attached externally, can no longer return into the belly.

But how should we avoid a danger unknown, how guard against these symptoms, if we are uninstructed about

about them? Possibly 'tis only by reading; and to render it the more useful, I propose to describe each species of Rupture in particular, after which I shall communicate the means to guard against, and remedy them.

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SEVENTHLY. The patient is troubled with loath-

ings, or an inclination to vomit, which terminate in a plenitude.

EIGHTHLY. At last the patient throws up the ali-

ments, then comes the fever, whole taste and smell are

extremely rancid.

DURING the last of these symptoms, the Rupture turns into a fever, comes on, and increases more and more.

But on the contrary, the vomiting, the Rupture turns into a fever, comes on, and increases more and more.

Back on the contrary, the Rupture turns into a fever, comes on, and increases more and more.

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EXPLANATION OF THE PART. THE navel, as I have already hinted, is a hole destined to give passage into the belly of the infant, during its stay in the body of the mother, to what we call the navel-string. It consists of three sorts of vessels; namely, a vein, two arteries, and a canal called urachus; This string is a continuation of the vessels which form the after-birth, which after-birth is attached to the bottom of the womb. By means of the vein, which is a part of this string, the blood is conveyed from the mother to the child, for its nourishment and growth; and the blood returned back to the mother by the intervention of the two arteries.

The urachus is a canal coming from the bladder of the child, for relieving it of the urine, by conveying it into the blood of the mother. When the child comes to the world, this string is tied up with a thread, and cut, to prevent the flux of the blood of the child; so that the hole of the navel is filled by the navel-string, yet imperfectly enough, as it afterwards comes to shrivel and dry.

CHARACTER OF THE DISEASE. When we happen at any time to strain much, the gut or the caul easily comes out at the hole of the navel, because there a less degree of resistance is found than any where else.

DIFFERENCES AND CAUSES. The Ruptures of the navel are not only formed at the hole itself of the navel, but some more commonly happen at the circumference of this hole, because these parts are very weak, and easily dilate by any violent efforts, or gentler efforts often reiterated. Women are very subject to this species of Rupture. The reason is, that, in pregnancy, the belly is extremely extended, the hole of the navel enlarged more than in the natural state, or that its circumference yields and gives way more easily than all the other parts; because, as was said, the circumference of the navel is weaker than the navel itself.

DIAGNOSTIC SIGNS: The swelling and elevation of this part is the characteristical mark of the Rupture, especially if this swelling disappears when abed, or when pressed with the fingers.

PROGNOSTIC SIGNS. In general this species of Ruptures is very difficult to cure: The small ones, and recent, are more dangerous than those of a longer standing; but these of a longer standing are of more difficult cure. These diseases are very dangerous in children; but more easily cured than in persons of an advanced age.

SYMPTOMS. The Symptoms of the Ruptures of the navel are the same, in general, with those in all the other species of hernias. One, peculiar to and common in them, is a species of slight colic, less painful than troublesome, which the patients are incessantly

cessantly afflicted with when up, and which increases after eating.

CURE. The Art of surgery supplies three different means of cure for this species of Rupture. The first is what is called the palliative: The second, the radical; and the third, is the means of remedying the symptoms.

THE PALLIATIVE CURE is that by means of which we only attempt to prevent the symptoms, by keeping the parts in the belly by bandages or trusses, which exactly close up the hole, at which the parts come out, and hinder their coming out when once returned into the belly. This method of cure suits the hernias, accompanied with inconveniencies, which oppose their radical cure, as those of too old a standing, those of too considerable a bulk, and those happening to women who are subject to have children.

THE RADICAL CURE is that by which Ruptures are cured by the remedies proper in these diseases, of which I shall speak in chap. xiv; as in chap. ix, of the means of removing the symptoms.

CHAP. VI.

Of the Rupture of the groin.

EXPLANATION. **T**HE Author of nature has so disposed the belly, that there are two holes, which answer to the parts, called the groin. These holes are destined to give passage from the belly on each side in women to a species of round string, called from its figure, the round ligament of the womb;

womb; it serves to keep that part in its place. The holes, thro' which these ligaments pass, are, from their figure, which is nearly round, called rings. In the natural state, these holes are filled by the parts which pass thro' them; but, upon violent strainings, they enlarge gradually, and at last give passage to the gut or caul, or to both together, out of the belly, and suffer them to form the Ruptures of the groin; they are called inguinal hernias or Ruptures.

DIFFERENCES. The hernias of the groin are different, and have different appellations according to the place they occupy. Some remain in the bending of the groin; these they call incompleat: Others descend to the great lip of the natural parts; and these are called compleat.

CAUSES. The particular cause of inguinal hernias proceeds from the rings being situated in the lowest part of the belly, which are continually relaxed by a certain quantity of water found at the bottom of the belly: If then the determining causes come to act, these parts being naturally open, and situated in the lowest part of the belly, the guts or the caul insinuate easily into them.

The determining causes are, loud crying, leaping, the strainings made to cough, at stool, in child-bed, &c.

The neglect of remedying the incompleat Rupture of the groin is the most immediate cause of the compleat Rupture; for if its progress be not stopp'd by bandages, it is natural to think that it must daily increase more and more, and arrive at that pitch, that all the guts shall come down to the great lip. Nothing is more common than such sorts of Ruptures. They are

are sometimes observed of the bigness of one's head, and hanging down to the thighs.

SYMPTOMS. The parts which ought to continue in the belly, which is their natural place, cannot be thus disarrang'd, without this consequence, a considerable disorder in the state of the health; for the guts cannot come down so low, and the stomach at the same time not be pulled down and displaced. As the guts are a continuation of the stomach, it then but imperfectly performs the digestion of the aliments; the patients are afflicted with windy colicks; the twitchings, to which the guts, the stomach, and other parts contained in the belly, are subject, cause almost continual weakneses, which are improperly ascribed to the cravings of hunger.

It rarely happens, that these large hernias are subject to strangulation; but should that happen, it is ever with the most imminent danger.

The incompleat hernias are rarely subject to the symptoms above described, yet more than the others subject to strangulation; because the rings, not having lost their spring, as in the compleat hernias, are more in case to make an impression upon the parts, and hinder their return, which constitutes the strangulation. It is, besides, true, that it is easier to guard against their strangulation, because easier to keep them in with bandages or trusses.

DIAGNOSTIC SIGNS. The incompleat hernia of the groin is distinguish'd by its facility of coming out and returning again, when not adherent, and by the signs of the compleat hernia.

The compleat hernia is also distinguished by its facility of returning again, when not adherent: If adherent, that is, if attach'd to the exterior parts, and form-

ed of the gut, we feel in it a certain degree of flexibility, like that which is felt on compressing a bladder not quite full of water : If the hernia be formed of the caul, on the touch we perceive a softness, like that we feel in handling a piece of tripe. If the hernia consists of both these parts, the signs are then mixt ; we feel, in handling the tumour, that flexibility, and at the same time, that softness just now mentioned.

PROGNOSTIC SIGNS. We may affirm of the hernias or Ruptures of the groin, that the incompleat are more dangerous than the compleat, and also of more easy cure ; for in the compleat, the disarrangement of the parts is more considerable ; but the hole of the ring being larger, they are less subject to strangulation.

CURE. The hernias of the groin are susceptible of three different methods of cure ; of which I shall speak hereafter, viz. the palliative, the radical, and of that which consists in removing their symptoms.

CHAP. VII.

Of the crural hernia.

EXPLANATION. **I**N the bending of the thigh, just in the middle, under the skin and the fat, there is an opening to one side of the ring, this opening, which is called the crural arcade, has in effect nearly the figure of a small arcade or arch. It serves to give passage out of the belly to the vessels which carry the blood for the nourishment of the thigh, the leg, and the foot, and to those which convey it from

these

these parts. These vessels are called crural, and the rupture made by this hole is also called crural.

This Species of Rupture happens more commonly to women who have had children than to others.

DIFFERENCES. The crural hernias differ only in bulk or size: the biggest exceed not a hen's egg, but ordinarily they are much less.

CAUSES. The increase of the volume or bulk of the womb, in proportion as the woman advances in her pregnancy, is the particular cause of that species of hernia, the guts being then obliged to bear in greater quantity on the sides of the belly; and as in this case, the muscles are stretched much, and their openings, called arcades, are more patent, the guts or the caul escape more easily at these openings, in the great strainings of women with child in the act of coughing, at stool, or in labour.

SYMPTOMS. They are very subject to adhesions on account of the continual rubbings or collisions they undergo in the motion of the thigh. The bandages being ill-made, contribute thereto much: They are also subject to strangulation.

DIAGNOSTIC SIGNS. The diagnostic signs of this species of hernia are the same with those of the incompleat hernia of the groin: The situation bespeaks its species, with respect to the place it occupies.

PROGNOSTIC SIGNS. The crural hernia is very dangerous, from the difficulty there is of reducing it into the belly; in case of a strangulation, the operation is much more dangerous. The radical cure of it is very difficult to compass; nay it is not an easy matter to keep it in with bandages; unless they are made with much care and judgment, so that one may affirm in

general, that this species of Rupture is very dangerous.

CHAP. VIII.

Of the ventral hernia.

WHAT THE BELLY IS. **T**HE belly consists of soft parts, which are the skin, the fat, and the muscles. By muscles we understand those parts of animals, which are known by the name of flesh, which consists of red fibres or strings, which easily separate, when the meat or flesh is boiled. These strings are joined to each other by other smaller strings of another species, and which are so fine and delicate, that the sight scarce discerns them. It is easy to conceive that these fleshy strings may divide and separate from each other, by the strainings we may happen to exert, and that the opening, which this division forms, may give passage out of the belly to the guts and caul with as much ease as the natural holes, of which we have already spoken. These sorts of ruptures, which may be thus formed, in all the extent of the belly, are called ventral hernias.

DIFFERENCES. The different places of the belly, where these Ruptures happen, characterize their difference; for some of them may happen about the navel; others below; others again on the sides of the belly. In fine, they may happen in all the parts of its surface, and they ever are Ruptures of the belly, otherwise called ventral hernias. All of them may be produced by the gut or caul, or by both together.

CAUSES.

CAUSES. The great extensions the muscles are exposed to in pregnancy, and in the dropy, are the proximate and most common causes of these species of ruptures: yet violent strainings may give occasion to them.

SYMPTOMS. Of all the species of Ruptures there is none that fatigues and spends the patients more; because in these cases there is an extreme relaxation in all the parts of the belly. The continual twitchings the patients are exposed to, incapacitate them almost to walk, they are ever complaining of weaknesses and sinkings, especially after meals, which allow them no other posture but that of sitting or lying down. These Ruptures also are subject to strangulation and adhesions.

DIAGNOSTIC SIGNS. The ventral hernias are known by their softness, their elasticity, and the facility with which they come out of the belly, and are again returned, especially at their beginning.

PROGNOSTIC SIGNS. These species of hernias are incurable. They are not so subject to strangulation as the other Ruptures, but should it happen upon them, it is highly difficult to remedy; these sorts of Ruptures are then very dangerous.

CURE. The palliative cure is the only one that suits here, such is the application of bandages; but no bandage are of more difficult execution than those for such Ruptures: And I may without presumption affirm, that no one, besides myself, has hitherto found out the commodious, and sure means of keeping in these ruptures, so as to prevent their coming out in what situation or position soever the patients are put.

C H A P. IX.

Of the means of remedying the Strangulation.

WHAT STRANGULATION IS. **T**HE strangulation, as was said in chap. iv. is so considerable a straitning of the gut, formed by the constriction of the parts thro' which it comes out of the belly, that its return is not possible. In this case we see, that it must be exposed to all the symptoms, of which I have given a detail in the same chapter, and of what importance it is, to remedy it speedily.

THREE MEANS TO BE USED. The strangulation is remedied by three means. The first consists in the situation, in which the patient should remain. The second, in the use of proper remedies. The third, in replacing the gut.

FIRST MEANS. In the strangulation of any species of hernia whatever, we must procure to the parts, which are too much extended, a suitable relaxation, to lessen the straitning of the gut. The patient then should be laid upon her back, the buttocks and breast be raised by means of pillows; by this situation the exterior parts of the belly are less extended; and the ruptured guts are made to have a greater tendency to return.

SECOND MEANS. The patient being in this situation, the suitable remedies must be forthwith used, and those proper to promote the reduction of the parts. Each country, each practitioner, has his peculiar remedies; but as some of them are approved by all the people of

the profession, and every-where to be met with; 'tis on such I shall insist, to the end that the instructed patients may use them directly, and till they can have recourse to the aid of their surgeon. The coldest and the hardest water, as that of a pump, thrown immediately upon the Rupture, is the most efficacious remedy, and which ought to be used the first, if one is so happy as to apply it in the first moments of the disease; if the patient be laid on a bed, and we apprehensive of wetting it, it will be sufficient to dip rags in this water, and applying them on the affected part, shift them every minute; to this water may be added half the quantity of vinegar. It is to be observed, that this remedy, which is the most sovereign of all those we are going to prescribe, would prove highly dangerous, if not used, at least, at the very first; because after that, it disposes the guts to a gangrene; but being properly applied, it promotes the return of the gut with as much ease as the most dextrous hand, and the most accustomed to this operation.

If these remedies have not been applied, for want of being able to seize on the critical moment, the patient must be bled directly, and that till she faints away, and the surgeon to improve the moment of the swooning, (during which all the parts are in a state of relaxation) to procure the return of the Rupture.

But it may happen that this means has not succeeded, either thro' the disposition of the patient, or the little experience of the surgeon; in that case we must apply on the Rupture the remedies capable of relaxing the strangling parts. Nothing is more fitted to produce this effect than the crum of bread boiled in water or milk; we may add to it oil. This poultice is wrap-

ped up in a small bag of fine cloth : But we here still more usefully employ warm milk put into a hog's bladder, and applied on the ailing part, or an omelet made with oil ; that of nuts is the best. These applications should be shifted every three hours, and during the use of them, the patient to be let the same quantity of blood every three hours also, taking at each time 5 or 6 ounces.

Whilst we thus labour to procure the relaxation of the parts which strangle the gut, we must endeavour to void the matters which may be evacuated from the guts, by means of small glisters of river water, in which has been boiled wheat-bran, and into which is put a tea-spoonful of sugar or common salt ; by thus voiding the guts, we also procure a relaxation to the exterior parts, by bathing and moistening them.

If these remedies prove ineffectual for two days, we ought not to hesitate a moment to procure the aid of some able surgeon, who is to act in consequence of the violence of the symptoms ; (for then they heighten more and more) while we wait for his assistance we must apply a poultice made of crum of bread boiled in red wine.

In all cases, wherein we use crum of bread, it must be crumbled very fine and smooth.

REGIMEN. During the course of the disease, the patients must have no nourishment, because they throw up all they take, and what is given them is quite lost upon them ; besides, the feeding them excites the vomiting, which comes on but too often.

A few spoonfuls of broth are sufficient at times, and a few spoonfuls of the simplest and lightest drink.

THIRD

THIRD MEANS. The replacing the parts, which is called reduction, is an operation of the hand, which consists in procuring the return, into the belly, of the gut or caul, which were come out.

It is very difficult to give rules on the manner of performing this operation; besides, it only concerns the people of the art to be instructed therein, and so I forbear speaking of it: Such as are curious of knowing the general rules, which may be given on it, may consult Mr. *Arnaud's* book, Chap. XIII. Sect. II. Part 1. It is enough for the patients to know that they ought not to quit their bed, after the reduction of the parts, before they are guarded with a proper bandage, to stop up the hole, thro' which the guts or caul were come out, and prevent this accident from happening again. As life depends on such sort of machines, and that the patients are incapable of judging of their defects, I am in the following chapter to give the exactest rules possible to judge of their good or ill construction, and thereby enable the patients themselves to determine about the advantages and disadvantages which may result from bandages or trusses well or ill made.

CHAP. X.

Of the trusses proper for the different species of Ruptures.

WHAT A TRUSSES are solid bands made in form of a circle, applied round the body, to oppose the issuing forth of the Ruptures.

THE

THE MATTER OF TRUSSES. The matter of which trusses are made, is a composition of iron and steel forged together so as to acquire a solid consistence, elastic and incapable of warping. This last matter should only make a third, a half, or two thirds of the truss, the rest to be of leather, the whole lined with cloth proper to guard against the hardness of the iron-work.

THE PARTS OF THE TRUSS. It is necessary to know the parts of the truss before we learn to make the proper application of it, or determine its position. Three principal parts are to be observed in the iron-work of the truss; the plate, the circle, and the tail. The plate is the anterior extremity, destined to fasten a cushion, which ought to stop up the hole of the belly; on the outside of this plate is a hook for fastening the girdle of leather. The circle is the part extending from the plate as far as to the tail; the tail is the posterior extremity of the iron-work, to which is fastened the girdle of leather. The plate or the cushion is also called the point of compression; the tail, the point of support.

THE CONDITIONS OF THE TRUSS. The iron-work should be adjusted in such a manner as to apply or fit exactly quite round the body, as otherwise it would be apt to bear false, or warp, gall the patient, and never close up the hole exactly, the Rupture be apt to fall out, the plate of the truss be galling, and give occasion to the adhesion, an untoward symptom, of which we have spoke in chap. iv.

TRUSS OF STEEL. The truss of steel is the only one which may be applied round the body, without being subject to any variation or warping, its turn or rounding being well moulded to the shape of the body for which it is made, renders it firm, invariable and incapable

incapable of shifting place, in what situation soever the patients put themselves.

SPRING-TRUSSES. Some workmen have imagined they gave a great degree of perfection to the truss by adding to the cushion a spring to make it bear downwards, without considering that if the compression be greater in the lower part, it is less in the upper, where the Rupture takes a new course, and ever and anon comes out.

JOINT-TRUSSES. Others have devised a joint-truss, the use of which is pernicious; for the truss, which should remain firm upon the body in the different motions of the patients, cannot possibly do so, its joints suffering it to open and close according to the motions of the patients.

ELASTIC TRUSSES. Many more advantages were imagined to be found in certain trusses, to which they have given the name of *Elastic trusses of a new invention*; this elastic virtue which constitutes their merit is very advantageous when this sort of truss is executed by an intelligent hand, who knows how to give the degree of turn or rounding proportioned to the shape of the body, on which it is to be applied, a thing extremely difficult, for otherwise it ever bears false, galls the patients, and neither restrains the Rupture.

TRUSS WITHOUT STEEL. The truss without steel has all the most dangerous inconveniencies possible; and we cannot too much caution patients against a machine, which may easily mislead, from the notion of restraint and pain at first excited in the mind by the idea of steel, which enters into the composition of other trusses; but if we consider that the cushion of the truss without steel has no fix'd point to render it immovable, we shall come easily to understand that it cannot effect an exact compression on the hole of the Rupture, but

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when the patient is abed, and that in that case most patients being able to do without a truss, this sort becomes useless, and proves dangerous in all other situations, as it prevents not the exit of the Rupture.

Therefore I conclude, from what I have just said on the subject of trusses, that those agreeing the best are the steel-trusses methodically made, that is, made according to the nature and species of the malady, and turned or rounded to the shape and structure of the bodies of the persons on which they are to be applied. But as it sufficeth not that patients have trusses properly constructed for them, but further necessary, they know how to use them to advantage, I shall in the following chapter recite the inconveniencies which may happen upon the use of these machines.

C H A P. XI.

Of the inconveniencies which may happen during the use of trusses.

THREE GENERAL **M**AY make patients, but little attentive to their ailments, lose all the benefit they should otherwise derive from the use of trusses executed according to the rules of art. Some arise on the part of the disease itself; others, of the patients; others again, of the trusses.

INCONVENIENCIES CHARGEABLE TO THE SCORE OF THE DISEASE. Ruptures of the caul are very difficult to keep in the belly, because that part being a fatty membrane, is very slippery. How little so-

ever

ever we neglect the retaining them in the belly, they are ever encreasing; patients should in that case then submit to wear their trusses night and day, and tighter than in a rupture of the gut.

Sometimes the Rupture is found to consist of the gut and caul together, and it may happen that in this case the gut enters into, and the caul remains out of the belly without being able to return on account of some adhesions which restrain it; the patients ought not therefore to go without the truss, as it is necessary to prevent the coming forth of the gut. Art then directs to make a truss that shall close the hole so as to hinder the gut from coming out, yet not over-compress the caul, for fear of causing some alteration therein.

INCONVENIENCIES TO BE LAID TO THE ACCOUNT OF THE PATIENTS. The two extremes of being too thin or too fat are inconveniencies on the part of the patients, which oppose the stability of the truss, and make the use of it always difficult, unless the surgeon and the patient, each on their part, give all the attention necessary.

In an extreme leanness, the bones being bare and uncovered, but for the skin, and these bones themselves forming eminencies and pits, the surgeon the most versed in making of trusses, must miscarry, if he employ not all the attention necessary to give them the shape proportioned to that of the bones; but the patients, on their part, ought to apply all their care, to keep them in place, as we shall see in chap. XIII.

In an extreme of corpulency, the too great quantity of fat gives the hips a difformity so contrary to the natural state, that the turn of the truss should also be very different from what is assigned it in a moderate corpulency. And it is very difficult for the truss to be

capable of producing the effect expected from it, if the patient herself favour not the intentions, and be not careful to tighten it from time to time.

THE INCONVENIENCIES TO BE MET WITH ON the part of the patients, in Ruptures of the navel, equally arise from the difformity of the belly, which is more or less prominent, more or less thin, tight, or soft, according to the greater or less degree of relaxation undergone by the skin, the fat and the muscles in the state of pregnancy, and of consequence the trusses for these sorts of Ruptures should be as differently constructed as the shapes of bellies differ; for if the belly terminate in a point towards the navel, the point of compression easily varies; if the navel be found lower than the hips, the point of support or bearing is very difficult to find; if the belly be more raised above the navel than below it, the truss tends to fall down below the Rupture: All these differences call for different degrees of attention in the make of the trusses, none of which, in this case, are capable of remaining in place, unless that sort of my invention, of which I shall speak at the close of this chapter.

The more the truss is apt to vary or shift, the greater degree of constancy the patient should put on, to give it the time to fix or settle, and the surgeon, on his part, endeavour to mould and fit it to the body of the patient by degrees. In persons extremely thin, we must not at first tighten it to the highest pitch, the use of it would then prove discouraging and insupportable. The parts, that serve for seat to it must insensibly be made accustomed to its impressions. In persons extremely fat, the same precautions must be used, because the fat can subside but by little and little under the truss; and so it must be tightened but in proportion as it sinks

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in the thickness of the fat, without which it would become too wide; these degrees of attention should then be divided between the patient and the surgeon, till the truss has acquired a firm and invariable situation. The patients ought not to put off their truss night and day, till they are become accustomed to it. When the Ruptures have a great facility of coming out, as those consisting of the caul have, every motion must be avoided capable of determining the parts to come out, as violent riding, raising the arms too high, and strong sneezing. Finally, if the belly be bound, the patient is obliged to strain much at stool, and then it is proper to procure an open belly by means of glysters, or making her swallow half an ounce of lenitive electuary; if notwithstanding this, she be obliged to strain in the least at stool, let her rest her hand on the upper part of the plate of her truss, to prevent its ascending; and this she is to do every time she sneezes or coughs or blows her nose; because in these great motions the cushion of the truss is always determined or apt to ascend, and then the hole it should stop, is found a little uncovered: By all this attention the parts will be gradually accustomed to remain in the belly and acquire the habitude of not coming out, and the patients being abed, in that case, they may pull off their truss at night.

INCONVENIENCIES ON THE PART OF THE TRUSS.
We have just said that trusses can only gradually mould themselves to the bodies of the patients; they are therefore of themselves subject to some variation, which must necessarily be remedied, to procure them the utmost degree of perfection; this perfection consists, as I have already said, in the just turn or rounding, and exactly proportioned to the parts on which the truss

truss is to be applied; for if it bears false, I mean, if it bears on one part more than on another of the circumference of the belly, it cannot fail to gall, and the point of compression be vicious and irregular; besides, this defect makes it subject to break in the part where is the void or hollow; this defect is not always perceivable at the very first time it is applied on, because the ornamenting, which is new and striking conceals its hollows, but after being wore for some days, the ornamenting flattens; the fat, which is under the girdle, subsides; the leather, which forms the rest of the circle, lengthens, and the truss no longer compresses in any part of the circumference of the hips, unless in the part which bears false. This inconvenience, which is considerable, is easily amended, when we come to be well acquainted with the manner of ordering these machines: But a defect common to all the trusses made for the Ruptures of the groin, and those of the bendings of the thighs, and for which no one before myself was ever able to find a remedy, is that they bear less on the opening, which they ought to stop, when one happens to sit very low, because then the belly sinks; this defect stands corrected in the trusses of my manner, to so considerable a degree of perfection, that the patients are always surprized at not finding that inconvenience, after having used the common trusses. And therefore it was found necessary to order the patients to sit always high; but that is not possible to be done every where, unless one was always to have her seat carried about with her, a thing highly inconvenient in a thousand instances; this defect is besides to be met with on many other occasions, as in persons very thin, when abed; the cushion of the common truss never bears on the hole in fat persons, in those of a reasonable good plight

plight of body, in like manner as in the thin; the same thing is also to be found, when they sneeze, blow their nose, cough, or are at stool, and all the means proposed to remedy this inconvenience, are as embarrassing as useless, and in no manner come up to the simplicity of my truss, in which there is found none of these inconveniencies. Here is the proper place to mention a discovery, which my application to be of service to persons of my own sex, put me upon, in reflecting on the lot of many women, whose delicacy of constitution incapacitates them to go their full time with child.

The most common cause of miscarriages is the same with that of Ruptures, it arises from the relaxation of all the parts of the belly, both internal and external, and takes rise in the too great quantity of serosities, which water the ligaments, which ought to keep in place each of the parts contained in the belly. Now the ligaments of the womb are so often relaxed by the serosities abounding in the blood, that that part remaining unsupported, on account of the weakness of its ligaments, it is impossible the child should come to its full time, because it determines by its weight the womb to remain in the lowest parts of the belly; and not finding there sufficient room to grow, dies thro' the constraint it undergoes.

The means I have found to remedy these troublesome disorders are as simple as the following reasoning, which I use to prove its efficacy. The ligaments of the womb, and the muscles of the lower belly being too much relaxed, the growth of the child is prevented, because the womb tends too much towards the lowest part of the belly, where it is straitened for room, the muscles of the belly not being strong enough to support it

it forwards : If by the means of a truss sufficient to balance the relaxation of these parts, that defect may be supplied, it is not to be doubted but that women subject to miscarriages will happily go their full time : The experience of upwards a hundred women, to whom I have given this relief, proves it ; having often miscarried, before the use of my truss.

It is made of a flexible matter without any iron-work at all, but strong enough to resist the weight of the belly. It stretches in proportion to the growth of the child ; nothing is more easy to apply and to wear ; it puts pregnant women, the most subject to miscarriages, in a condition to walk and go by any carriages ; and it becomes so commodious to them, by giving a degree of firmness to the whole body, that many women use it out of the time of their pregnancy. But it proves, besides, highly useful to women, whose belly, being very heavy and pendulous, hinders them to walk, and to persons to whom it is not possible to apply the common trusses of the navel.

C H A P. XII.

A method for taking the measures of the trusses, necessary for persons afflicted with ruptures.

PERSONS, who would incline to procure trusses for themselves, not always living near great towns, where they are commonly made, have need of instructions to enable them to send their exact measure ; I imagine it to be useful for such, to put them on the
easy

easy method of taking exactly the dimensions of their own bodies, and to insist more particularly on some circumstances they ought to observe in relation to the different species of Ruptures.

FIRST, The patient should give a particular detail, in an instructive memorial, of her constitution and age; whether she be maid or married woman; the date of her Rupture; and whether the place she lives in be moist and marshy, or dry.

SECONDLY, She should, as much as may be, recollect the cause, which has determined or occasioned her Rupture, whether a blow, a fall, a fit of coughing, a sudden effort or straining, or child-bearing.

THIRDLY, She must determine nearly the size of the Rupture, and on what side it lies.

FOURTHLY, She must set down precisely its place, if in the groin or bending of the thigh.

FIFTHLY, Whether or no it re-enters, and whether, in re-entering, it returns more difficultly in a standing than lying posture.

SIXTHLY, When the Rupture is in the bending of the groin, it is necessary to distinguish whether it descends as low as the side of the natural parts.

SEVENTHLY, If it is in the bending of the thigh, it is necessary to specify, whether it be round or long.

EIGHTHLY, If there are two Ruptures, it is necessary to hint which is the biggest.

NINTHLY, It must be remarked, whether the person be fat or thin, or only in a tolerable good plight of body.

TENTHLY, It must be hinted, whether the patient has one hip bigger than the other, which is a very common case; or if there be any other deformity, it is necessary

cessary not to fail describing it, and setting down its place with ink upon the measure.

To this memorial the patient may add the measure of her body, taken with a slip of paper of a proper length. Whether the Rupture be single or double, in the groin, or bending of the thigh, it is sufficient to lay the middle of the slip of paper immediately over the part where the clift of the breech ends, and to join the two ends of the paper above the place where the top of the natural parts re-unite.

If the rupture be in the navel, in the same manner will be taken the size of the belly, by laying the middle of the slip of paper on the part of the back which answers to those of the sides, which are between the ribs and the bones of the hips, and by joining the two ends of the paper over-against the part where the middle of the paper has been laid behind the back; if the Rupture be precisely at the meeting of the two ends of the slip of paper, that must needs be specified in the memorial; if not, it is necessary to mark exactly at what distance from this meeting of the two ends of the slip the Rupture lies, whether a quarter of an inch, half an inch, or one or two inches above or below.

Care also may be taken to specify in the memorial, *1mo.* The part of the navel the Rupture occupies, either the middle or its circumference, either lies above or below it, or to one side. *2do,* If it is of an old or recent standing. *3tio,* Its size. *4to,* Its shape. *5to,* If it re-enters or not. *6to,* If the navel be higher or lower than the bone of the hips. *7mo,* If the belly be hard or very soft; 'tis moreover necessary to know, whether the patient has had children, and how many.

All those particulars are very necessary to be mentioned, in order to execute with care the trusses proper in each of these circumstances, and render them as commodious as useful, when the patients on their part shall use the necessary care in their just application: On this head I am to prescribe some rules in the following chapter.

CH A P. XIII.

On the manner of putting on the trusses; necessary precautions to be observed, previous to the laying or adjusting them.

THE truss would become absolutely unserviceable, if improperly adjusted. It is, therefore, of importance to the patients, to have rules to follow for their just application. These rules are the same for persons of what age soever, even for children at the breast.

The use of the truss is to stop the hole, at which the rupture comes out, in order to prevent its coming out; we must for that purpose begin with reducing it back into the belly.

The Ruptures, unaccompanied with symptoms, re-enter with facility enough of themselves, when the patients are abed; of consequence, the morning, at the hour of waking, is the time to apply the truss. To do it with ease, of what nature soever, or in what part soever the Rupture be, we pass the girdle below the

back, and approach with one hand the cushion of the truss over-against the part of the Rupture; with the other we examine whether any thing remains out of the belly; afterwards, laying hold with this last hand on the girdle of the truss, we pull it to ourselves towards the cushion, whilst with the other we fix the cushion directly upon the part where the Rupture appeared before reduction: We at the same time fasten the girdle to the hook, which is on the outside of the cushion.

To procure the proper position to the truss, the lower border of the girdle should be behind the back, immediately above the clift of the breech. When we are sure it has gained its due position, we must then tighten it sufficiently: For this purpose we lay hold on the girdle with one hand, at the part where it joins to the iron-work of the truss, and we pull it successively by slipping the hand as far as to its extremity; while with the other hand we hold the cushion steady on the part where it should be placed; if it were not supported, it would shift to one side of the thigh, and no longer be found on the hole of the Rupture. It is not necessary that the truss be too slack, and neither must it be too tight. You will observe to tighten it from time to time; fat people should particularly mind this, because the longer they use the truss, the fat sinks under the girdle, which of consequence becomes too slack; which is the reason that the over-slackening of the girdle is charged on its lengthening: And it also happens that the girdle of the truss is found hid by the pads which the fat forms both above and below, when the fat has been entirely flattened under the girdle by its reiterated compressions.

Almost all the patients have the custom of placing the cushion of their truss too low, especially such whole Ruptures fall down pretty low, without considering, that the business is only to stop the hole, to prevent the parts from coming out; for when the cushion is placed so low, the hole remaining unstopped, the Rupture comes out above the cushion of the truss.

When the patients are thin, the truss falls not to ascend, especially when they are abed: In this case we must use a small strap, which is fixed to the truss; we pass it under the thigh, and fasten it to the iron-hook, which serves to fix the girdle; but we must observe, that it ought to be put under the leather of the girdle, as otherwise it would be always apt to loosen.

When there is a necessity of wearing the truss of nights, we must take care to adjust or put it in order before we get out of bed of a morning, and as the motions we give ourselves lower or raise it behind, we must not fail replacing it in its due position, as otherwise the cushion would not bear exactly upon the hole.

With respect to children who are not cleanly, we must be careful of shifting their trusses every day, to prevent the ordure from heating or fretting them.

In plump fat children, the girdle should behind be a good finger's breadth above the clift of the breech; in the thin, it should immediately touch the clift, or even be a little lower.

We must be ever cautious in shifting their truss, that the Rupture does not fall out again; for this purpose, we must have ready at hand that which is to replace the other, and lay the finger on the hole, till the second truss is adjusted.

C H A P. XIV.

Of the radical cure of Ruptures.

BY radical cure we mean such as removes a disease to its very root. The radical cure of Ruptures is, therefore, that, by means of which we may cure these disorders, without apprehension of any return. Is this possible? 'Tis what may be easily proved.

But as I should be obliged to transcribe word for word what Mr. *Arnaud* has at large to so good purpose writ on this subject, such as would satisfy themselves of this truth may consult the book of that author, chap. xiv. sect. ii. part i.

All I can say to prevail on the patients not to suffer themselves to be discouraged, as commonly those are, who are afflicted with these disorders, is, that there are none for which there is a greater variety of remedies known. The only question is to know how to appropriate them to the constitutions of the patients, their age, their sex, the climates they inhabit, and to know how to distinguish the species of Ruptures which are curable from those which are incurable. 'Tis with these infirmities as with all the others; such a one cannot be cured by a remedy, which ten or a score others have found the good effects of, because the circumstances differ. This is the reason, why the remedies of the good women do sometimes much good, and very often a great deal of harm.

C H A P. A XV.

Of the Ruptures of the womb, otherwise called the inversion of the womb, relaxation of the womb, falling of the womb; the relaxation and inversion of the vagina.

WHAT THE **T**HE womb is the principal organ of generation, it is situated between the bladder and streight gut. The womb is of the shape of a pocket-flask; it is divided into two parts; the one called the neck, the other the body of the womb: Its neck is terminated by an opening, called the orifice; it answers to the bottom of the vagina; its body is the largest part; it is seated in the lower belly beyond the vagina, so that we can only reach to the neck of the womb, when we introduce the finger into the part.

The womb is hollow within, and kept in its place by four ligaments; two called the broad, and two the round.

'Tis these ligaments we are principally to regard, in order to form a just idea of the Ruptures of the womb: These ligaments are capable of an extraordinary degree of extension; otherwise the womb could not place itself in the belly, by stretching in the time of pregnancy; but would continue in its natural place, and be there straitned and confined.

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The broad ligaments cover all the exterior bottom of the womb. They are there firmly attached; they rise on each side, and stretch, by enlarging, to proceed to fasten on the parts which cover the hip bones internally: 'Tis a sort of very strong membrane.

The round ligaments are so called from their round figure like a cord; they are as big as the quill of a raven; of a nature resembling that of the broad ligaments; for they are properly only a division of them; they come out of the belly at the holes which are in the groin, by which the Ruptures of the groin happen; they proceed to fasten themselves to the bone of the thigh. The womb is kept in place by these four ligaments.

The vagina is a canal, consisting of a very thick membrane, capable of dilating and contracting; this canal serves for an emunctory or drain to the flowings from the womb.

INVERSION OF THE WOMB. The womb being the principal organ of generation, it sometimes happens, that in child bearing the inside of this comes out at its opening or orifice, in the manner as turning a purse inside out; this disorder has, besides, other causes; but these very rare. The being over-fat is one in particular. This distemper is so distinctly handled in Mr. *Arnaud's* book, chap xxiv. sect. ii. p. 1. that I thither refer such as would be further informed about it: I could only copy this author, and that would be to disgust him.

RELAXATION OF THE WOMB. Tho' the term relaxation of the womb be improper, I shall however make use of it, because all authors do so: For it is not the womb that relaxes; 'tis its ligaments, which lengthen-

lengthening, suffer the womb to quit its natural place, and thus to fall down more or less into the vagina.

When the ligaments are only relaxed to a certain pitch, this is what is properly called the relaxation of the womb, because it is come down lower than the place it naturally occupies, but comes not out of the vagina.

FALLING OF THE WOMB. When the womb comes out at the vagina, then that species of Rupture is called the falling of the womb: This disorder may be more or less considerable, according as it comes out more or less; there are some, in whom, for want of minding it, it hangs down as low as the middle of the thighs, and then it grows in bigness to a pitch as sometimes to become as big as the head of a child.

RELAXATION OF THE VAGINA. The vagina relaxes too, and that either in part or in whole; if in part only, the disorder is called, the relaxation of the vagina; if in whole, the inversion of the vagina; then it forms an eminence, which comes out of the natural parts.

CAUSES. The general and particular causes of these disorders are the same with those contributing to form the other Ruptures; of consequence young women are subject to them. 'Tis true they are not so much exposed to them, as the married; but there are some in whom the womb falls, and the vagina relaxes to the highest pitch.

Married women are more subject to them, because in pregnancy the ligaments of the womb are extremely lengthened, by the weight of the child it contains: Also those who are not tender enough of themselves, after delivery, by keeping at rest and not stirring, are more subject to these infirmities than others.

SYMPTOMS. The symptoms of these disorders differ according to the case. When there is only a relaxation of the womb, the patients feel some pain towards the loins, and at the top of the thighs. They walk with less facility, and are never better than when sitting, or abed.

When the womb comes out a little at the vagina, besides what I have just said, the patient has a desire to make water often, or a difficulty in making it.

When the womb is in whole come out, it is exposed to the rubbing of the thighs, and to receive the impressions of the urine, which runs upon it in making water, which causes it to smart, occasions painful excoriations, and considerable ulcers.

These symptoms are followed by those which attack the womb itself; it is inflated and hardened, and then it is very difficult to effect its return.

The symptoms which accompany the relaxation of the vagina and its inversion, are not so considerable, unless when it carries along with it the womb; for then the patients feel the same pains in the loins and thighs as in the falling of the womb. But, in the simple relaxation of the vagina, there is no pain.

DIAGNOSTIC SIGNS. These disorders are known by the symptoms I have just mentioned, excepting the simple relaxation of the vagina, which can only be known by a sort of swelling or inflation, felt at its entrance.

PROGNOSTIC SIGNS. In these four disorders, the relaxation and inversion of the vagina are the most difficult to cure, tho' without any danger to life; the relaxation, or falling of the womb, just beginning,

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is easily enough cured, when the distemper is not of an old standing: It even happens sometimes, that after a new pregnancy, if the patient be tender of herself in her lying-in, and keep her bed close, she is cured without the aid of any remedies.

But the grand symptoms to which the womb is subject, when it comes out entirely, are sufficient to manifest the danger, and the difficulty there is to cure the patients.

CURE. The relaxations and falling of the womb, the relaxations and inversions of the vagina, are susceptible, as the other species of Ruptures, of a twofold cure, the radical and the palliative.

I shall not engage in the detail of the first, that would carry me too far, and I could not abridge it, without omitting things too necessary; it may be seen in chap. xxv and xxvi. sect. ii. P. I. of Mr. *Arnaud's* work.

The palliative cure, which is the most used, consists in keeping in place the relaxed or displaced parts by the means of pessaries.

Pessaries are instruments which serve to keep the womb and the vagina in place, and to hinder their departing too much from their natural state. The common use of these machines, which are made in different forms and shapes, according to the notions of him who applies them, or the nature of the malady, has inconveniencies so considerable, that the advantage derived from them is worse than the disease itself; besides, that we are obliged to introduce them into the part with violence, and keep them there without scarce ever removing them; these pessaries are always made either of matters subject to corruption, as cork and wood; or incorruptible, as

gold or ivory, which hurt the womb or the vagina; this causes a flow of matter extremely fetid, with which the patients themselves are always offended, and often those who approach them.

These reasons have put Mr. *Arnaud* on contriving a sort of pessaries, with all the advantages we can desire, and without any of the inconveniencies of the others. It is the only pessary I would advise patients to use, and whose description is very clearly given in that author's book chap. xxvii. sect. ii. P. I.

CHAP. XVI.

Of the relaxation of the fundament.

WHAT THE FUNDAMENT IS. **T**HE fundament is the extremity of the guts, which terminate in a round opening, with a power to open and close. Its use is to allow the discharge of the excrements and wind out of the belly.

The extremity of the gut, which ends at the fundament, is sometimes relaxed; and comes out by turning itself, just like the finger of a glove, when we pull the glove by turning it.

This malady happens very commonly to children; women are also subject to it sometimes.

CAUSES. The cause of this relaxation consists for the most part in the too great quantity of serosities, which water this part; the palsy of the muscles of the fundament contributes sometimes too.

But strainings determine this distemper; as crying in children, constipation in persons in years, and the effort exerted in child-bearing.

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SYMPTOMS. It is rare that this malady is accompanied with untoward symptoms; being so incommodious, people never put off the looking out for the proper aid. But were the procuring the return of the gut neglected, an inflammation would be formed in it, and a gangrene might seize upon it, which would expose the patients to a very great risk.

DIAGNOSTIC SIGNS. This distemper is known by the eminence or lengthening formed by the gut of the fundament.

PROGNOSTIC SIGNS. According to what we have just seen of the symptoms of this distemper, it is easy to judge, that it is dangerous, when neglected.

CURE. We remedy this distemper by procuring the return of the gut, and retaining it, when returned; or by employing the remedies proper to fortify and strengthen it. All these means are recited in chap. xxviii. of Mr. *Arnaud's* book.

C H A P. XVII.

Of false hernia's.

IT now remains to speak of false hernia's. These distempers are so rare in the sex, that I might well pass them over in silence; yet as I have seen some instances, and that they were taken for Ruptures; I think it not from the purpose to give a general notion of them.

WHAT A FALSE HERNIA IS. We understand by false hernias, tumours that happen in the parts where the true Ruptures are formed; they are called false, because they impose upon us, by giving room to think them true Ruptures, unless we carefully consider them.

DIFFERENCES. There are two species of them; some consist of water; these are called hydroceles; others, of flesh, or thick, hard, and viscid humours; these are called extraneous bodies.

The hydroceles sometimes shew themselves in the bendings of the thighs, in the groin, and in the lips of the natural parts; there may be formed of them two in the navel.

The extraneous bodies are formed at the entrance of the vagina, and in its cavity; sometimes also they are attached to the neck of the womb.

DIAGNOSTIC SIGNS. The false hernias are known by the impossibility there is of procuring their return; to the difference of true Ruptures, which return easily to the belly; or at least have returned before they have got adhesions, or are become of enormous bulk; but hydroceles, how small and recent soever they be, never return.

It is the same as to extraneous bodies, these return not; but they are distinguished from hydroceles, as they are quite apart and separate from the parts to which they are attached; hydroceles, on the contrary, unite with the parts where they grow.

PROGNOSTIC SIGNS. We may say, that these distempers are attended with no uneasiness; they are rather incommodious than dangerous.

CURE. Hydroceles are cured by tapping, or discussing them by resolvents; they are, besides, cured by compressions, by the means of some proper bandages or trusses.

As to extraneous bodies, these are destroyed by ligature or incision.

F I N I S.

